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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/753,547

01/04/2001

Arendse Bernth

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1833

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7590

07/15/2004

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EXAMINER

NGUYEN, CHAU T

ART UNIT

PAPER NUMBER

2176

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/753,547

Applicant(s)

BERNTH ET AL.

Examiner

Chau Nguyen

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 01/04/2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

1. Claims 1-25 are presented for examination.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 3-6 and 13-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter "slot-filling information of the first parse" which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 11 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Domini et al. (Domini), US Patent No. 6,085,206.

6. As to claims 1, 11 and 23, Domini discloses a method for intelligent spellchecking, comprising:

performing a spellchecking of a word by considering an entire sentence and a structure of the entire sentence (Abstract, and col. 3, line 31 – col. 4, line 30: verifying the accuracy of the grammatical composition of a sentence and the spelling of words within the sentence in an electronic document, and determining whether any of the words in the sentence are misspelled).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2176

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2-10 and 12-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Domini as applied to claims 1, 11 and 23 above, and further in view of Schabes et al. (Schabes), US Patent No. 6,424,983.

9. As to claims 2, 12 and 20, Domini disclose parsing the sentence to produce a first parse (col. 3, line 55 – col. 4, line 30: a sentence is parsed from a document);

examining a list of words in the sentence and identifying a confusable original word along with its potential replacement (col. 3, line 55 – col. 4, line 30 and col. 11, line 9 – col. 12, line 7: determining whether any of the words in the sentence are misspelled and a list of words for suggestion (its potential replacement) to replace the misspelled words);

replacing the confusable word with its replacement to produce a resulting sentence (col. 12, line 50 – col. 13, line 18: the misspelled word will be replaced with one of the suggestions); and

However, Domini does not disclose parsing the resulting sentence to produce a second parse. Schabes discloses detecting misspelled words in a text, for each misspelled word, determining a list of alternative words for the

Art Unit: 2176

misspelled word, replacing the misspelled word in the text with the selected one of the alternative words, and then checking the document for grammatically-incorrect words by generating a finite state machine (parsing) for text in the text document (Abstract, col. 2, line 45 – col. 5, line 57 and col. 22, lines 32-62). Since Schabes teaches a system for spelling and grammar checking, which is similar to the system for verifying accuracy of spelling and grammatical composition of a document of Domini, thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schabes and Domini to include parsing the resulting sentence to produce a second parse. Schabes suggests that using a spelling and grammar checking system is to correct words that have misused in a given context in cases where the words have been spelled incorrectly and in cases where the words have been spelled correctly.

10. As to claims 3, 4, 5 and 13, Domini and Schabes (Domini-Schabes) disclose comparing slot-filling information of the first parse to slot-filling statistics for the original word, comparing slot-filling information of the second parse to the slot-filling statistics for the replacement word, and comparing two matches with the slot-filling statistics found for the original word and the replacement word (Schabes, col. 17, line 8 – col. 22, line 26: Schabes suggests that using a spelling and grammar checking system is to correct words that have misused in a

Art Unit: 2176

given context in cases where the words have been spelled incorrectly and in cases where the words have been spelled correctly).

11. As to claims 6 and 14, Domini-Schabes disclose wherein a better match indicates the preferred spelling in context (Schabes, col. 17, line 8 – col. 22, line 26: Schabes suggests that using a spelling and grammar checking system is to correct words that have misused in a given context in cases where the words have been spelled incorrectly and in cases where the words have been spelled correctly).

12. As to claims 7 and 15, Domini-Schabes disclose wherein said first and second parses produce a parse score and in determining a parse score each parse automatically considers a slot-filling statistics of the original word and the replacement word (Schabes, col. 9, lines 12-25).

13. As to claims 8 and 16, Domini-Schabes disclose wherein a comparison of the matches includes checking both a mother designation and a daughter designation of words in said sentence (Schabes, col. 20, lines 40-49).

14. As to claims 9, 17 and 21-22, Domini-Schabes disclose wherein a decision as to which word is best depends on comparing first and second parse scores, independently of any use of lexical statistics (Schabes, col. 17, line 8 –



Art Unit: 2176

col. 22, line 26: Schabes suggests that using a spelling and grammar checking system is to correct words that have misused in a given context in cases where the words have been spelled incorrectly and in cases where the words have been spelled correctly).

15. As to claims 10 and 18-19, Domini-Schabes disclose wherein a selection of a best match for a word determined to be misspelled is performed by comparing first and second parse scores. (Schabes, col. 10, line 52 – col. 11, line 41).

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (703) 305-4639. The Examiner can normally be reached on Monday-Friday from 8:00 am to 6:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Joseph Feild, can be reached at (703) 305-9792.

The fax phone numbers for the organization where this application is assigned are as follows:

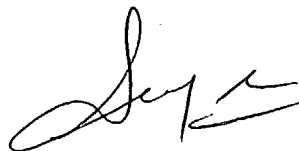
(703) 872-9306 (After Final Communications only)

(703) 872-9306 (Official Communications)

(703) 746-7240 (for Official Status Inquiries, Draft Communications only)

Inquiries of a general nature relating to the general status of this application or proceeding should be directed to the 2100 Group receptionist whose telephone number is (703) 305-3900.

Chau Nguyen  
Patent Examiner  
Art Unit 2176



**SANJIV SHAH**  
**PRIMARY EXAMINER**